
DO AUDIT FIRMS' ATTRIBUTES CURE OR MINIMIZE INCOME SMOOTHING BY MANAGEMENT?

ADEUSI, Sunday Amos
Adekunle Ajasin University
Akungba Akoko, Ondo State Nigeria
amos.adeusi@aaua.edu.ng

ABSTRACT

Credibility of information emanating from audited financial reports of corporate firms is germane to stakeholders because it guides decisions-making. However, opportunistic behaviors of capital users, especially in terms of earnings management in smoothing corporate incomes has called most financial reports of firms to questioning. This study investigated influence of audit firms' attributes on earnings management of listed firms on Nigeria exchange group (NGX) for the period of thirteen years (2010-2022). Ex post facto and quantitative research design was employed. Mixed-effects ML regression, correlation matrix and descriptive statistics were used to dissect data collected. The results of the analyses revealed that earnings management proxied by discretionary accruals was negatively affected by all attributes of audit firms used in the study (audit firms' size, joint audit, audit firms' tenure ship and audit firms' fees). The study thus concluded that audit firms' attributes have the capacity to cure or minimize income smoothing by management; and recommends that capital owners that seek to mitigate capital users' habit of smoothing incomes should engage audit firms that possess the attributes covered in this study.

Keywords: Audit firms' attributes, audit firms' tenure, discretionary accruals, income smoothing

INTRODUCTION

Capital users' attitude of behavioral opportunism has permeated corporate space globally. This attitudinal behavior has caused colossal pecuniary losses in the corporate world. Since the emergence of the 21st century, the corporate world has experienced collapse of blue-chip firms such Eron, World.Com and several others (Unerman, & O'Dwyer, 2004). How did the mighty corporate personalities collapse? This could be traced to managerial attitude in the area of application of discretion attitudes over selection of accounting assumptions, principles or methods in order pervert adverse effects on earnings. These actions cumulate to earning management. Earnings management can be categorized into accrual earning and real earning management.

Earnings management happens when capital users deploy judgmental perceptions in financial reporting and in restructuring financial transactions to either mislead some stakeholders as to schism that underpin economic performance of corporate firms or to influence contractual performance that lean on reported accounting numbers (Healy & Wahlen, 1999). Extant literature has affirmed that there are two forms of earnings management employed by users of capital (Na et al., 2023; Baber et al., 2011; Ayers et al., 2006).

Thus, where capital users apply their discretion on certain accounting assumptions or method to achieve perversion that affect earnings and subvert the perception of stakeholder that the earnings looked good is called discretionary accruals earnings management. But in situation where capital users apply manipulation through strategic timing of operating, investing and financing decision in cash flows, this is real earning management.

These attitudinal behavior of capital users on the use of earnings management to achieve their parochial opportunist behaviors at the detriment of capital owners have engendered concern amongst accounting regulators, accounting professionals, capital owners and other stakeholders toward earnings smoothing (Delgado et al., 2023). And this is one the reasons for institutionalization of corporate governance

mechanisms (CGMs). It is conceptualized that CGMs can guarantee conformity among preparers of financial reporting with generally accepted accounting principles (GAAP) with the capability to preserve the credibility and reliability of corporate financial reporting.

The functionality and sustainability of corporate governance mechanisms in corporate world is capable of curbing the appetite of capital users toward opportunistic behavior of employment of earnings management at the detriment of shareholders wealth maximization (Sun et al., 2014). A significant number of studies (Cohen et al., 2008; Krishnan & Visvanathan, 2008; Bhagat & Bolton, 2008; Jerry et al, 2010; Dutilleux & Willekens, 2009) have been conducted on ability of audit firms' characteristics and audit quality to effectively oversee the reduction or outright cure of earnings management.

Extant literature establish that earnings management is capital users' conceptualization of negative intervention to figures in financial reporting process with intent to smoothen income to attract other stakeholders at detriment of the capital owners (Bassiouny, 2016; Hassan & Ahmed, 2012). Auditing and assurance services aim to improve and enhance quality of financial reporting with invariability to suppress the tendency of earnings management. Studies conclude that audit firms' attributes have inverse effect on earnings management (Piot & Janin, 2007; Scholtens & Kang, 2013).

Extant literature also affirm that where the credibility of financial report was guaranteed through independent examination of financial report by appointed external assurers; this assurance service can reduce incidence of earnings management. The attributes of audit firms and external auditor are potential mechanisms that have the potency to reduce agency problem (Knapp, 1991; Beasley & Petroni, 2001; Chen et al., 2005). The interface between audit firms' attributes and quality of audit work done on financial statement have the potential to enhance quality of audited annual financial report for external stakeholders (Abbott & Parker, 2000).

Hence, the aim of the study is to test the veracity of past studies on the ability of audit firms' attributes and audit quality to reduce or eliminate income smoothing by management. The next section provides literature review and hypothesis development. This is followed by a section that describes the methods applied; while a section detailing empirical results and diagnostic checks comes next. The final section concludes the study.

LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESIS

Earnings Management

Jensen and Meckling (1976) sufficed that agency problem is the end result of divergent interest between capital owners and capital users as a result of conflict of interest between principals and agents. Hence, earnings management (EM) was devised by capital users as a strategical tool in minimizing or solving agency problem by providing performance metrics associated compensation contract (Adeusi, 2019). In order to achieve this, capital owners mandate capital users to maximize share price. This gives incentive to capital users to manipulate company profit with hope of achieving expected targets owners capital (Healy & Wahlen, 1999).

Earnings management occurs when users of capital employ discretionary behavior in connection to accounting figures with or without constraint, to maximize firm value. Davidson et al. (2004) postulated that earnings management is a process that enables deliberate actions within generally accepted accounting principles by users of capital to circumvent the ideals of prudence and targeted level of profit, and window dress it at the detriment of other stakeholders. This has been a huge problem that permeate corporate world; and lead some stakeholders lose confidence in information provided by users of capital.

Audit Firms' Attributes

The auditors possess the potential to minimize agency problem in the corporate world. It has been affirmed in extant literature that the nexus between audit quality and audit firms' attributes can hypothetically enhance quality of financial report which also enhance credibility of financial information. Lin and Hwang (2010) stressed that quality of external auditor and audit firms' attributes offer considerations to esteem whether auditors corroborate honestly and objectively to reduce or curb the menace of earnings management practices by opportunist capital users. Hence, there is need to dissect components of audit firms' attributes in relation to earnings management of corporate audited annual financial report.

Audit Firms' Size (Audit quality) and Earnings Management

Audit firms' size have been dichotomized in extant literature into big4 and non-big4. Becker et al. (1998) opined that big4 audit firms project higher audit quality. That is, less earnings management. Hence, they report discretionary accruals that significantly decrease income compared to audit firms in the non-big4 category. Francis et al. (1999) supports this assertion by arguing that high-earnings management firms have greater opportunity for behavioral opportunism, hence require capital owners to employ big4 audit firms to provide assurance services that earnings credible.

Audit quality depends on significance of audit firms reporting by investigating nodular nexus and report on violation (Watts & Zimmerman, 1986). Big4 audit firms have robust incentives to produce and preserve high-quality audit report; the reason being that big4 audit firms have more clients to cater for. Consequently, broadening the chances of allocating sufficient and adequate resources to auditing. This will enhance the protections of their clients and their reputation.

Extant literature has it that big4 audit firms potentially weakens earnings management. Also, scholars opine that a positive nexus exists between audit firms' size and earnings management. It is evident from scholars' opinions that big4 audit firms produce additional efficient auditing, assurance services more than non-Big4 and in other words the efficiency of big4 reduces earnings management. Thus, we hypothesize that:

H₁: In Nigeria, earnings management is negatively associated with audit firms' size

Joint Audit and Earnings Management

Joint audit means involvement of two or more separate and independent audit firms engaging in examining financial statement for a single client (Zerni et al., 2012). Joint audit entailed joint planning and joint procedures. It means that audit work is jointly organized and divided between independent audit firms involved. This is to ensure that there are no repetitions of audit duties. The end product of joint audit work is the issuance of a single report signed by the independent auditors.

Hence, joint effort of independent audit firms engender positive influence on quality of audit and financial report of corporate entities in divergent ways. Firstly, joint audit enhance independence of external auditors in comparison to individual audit. This is because management of firms being audited cannot influence multiple independent audit firms concurrently.

Secondly, mutual supervision between independent audit firms, where each independent audit firm ensure the use of verifiable and appropriateness of audit planning and procedures. This engender relevance, reliability and sufficiency of audit evidence obtained by the independent audit firms, hence, opinions expressed will be premised on adequate and sufficient assessment of conclusions reached based on audit evidence obtained.

Thirdly, joint auditors are jointly liable for the audit assignment they undertake. Thus, it is important that:

- a) terms of assignment as a joint audit should be clear. One auditor should not do the accounting and the other the audit;
- b) a meeting of the joint auditors and the client is important, to agree on how to approach the work and the responsibilities of the auditors, including timing and staffing;
- c) the joint auditors should meet to agree on the division of work and should ensure all agreements as to work division are in writing and unambiguous;
- d) agreement is reached on exchange of working papers, so that each joint auditor will have a full set of working papers for each year's audit;
- e) there is free exchange of information during and after the audit;
- f) periodic review of work progress by partners of the two audit firms should not be de-emphasized;
- g) the use of the same audit programme by the joint auditors is encouraged to ensure that all aspects of the work are covered;
- h) a joint work on some critical areas of the client's operations is carried out e.g. review of loans and advances of a bank;
- i) financial statements are jointly reviewed by the joint auditors before presentation to audit committee/management; and
- j) both firms agree on the audit opinion and the content of the management letter.

Thus, we hypothesize that:

H₂: In Nigeria, earnings management is negatively associated with joint audit

Audit Firms' Tenure and Earnings Management

Audit firm tenure means the years an audit firm is retained to consistently scrutinize the financial statement of a company. Extant literature suggests that audit firm tenure and earnings management have provided mixed points of views (Bamahros et al., 2015). First instance, independence of audit firms can be compromised by auditor-client relationship. On the other side, it has been affirmed that extended audit firm tenure has positive influence on audit quality and leads to lower levels of earnings management.

The positive influence of audit firm's tenure on earnings management can be based on two foundations. Firstly, the low-balling hypothesis argues that auditors charge lower fees in the early years of engagement to attract clients and because they need to keep clients long enough to recover their initial losses. This may threaten independence and earnings quality in the early years of an engagement.

Gul et al. (2009) tested for the low-balling hypothesis as an explanation for the association between short audit firm tenure and lower earnings quality but they did not find empirical evidence to support this argument. Secondly, the learning effect hypothesis argues that auditors gain more client specific knowledge through time and, therefore, audit quality and earnings quality improve across time."

Audit firm tenure influence quality of service rendered. Where audit firms become more involved in the routine administration of any capital user, the tendency of professional compromise, which informs poor accounting practices become likelier. Scholars have conceptualized audit quality from different perceptions. De-Angelo (1981) suggests that audit quality stems from audit firms' independence and technical capability. Technical capability is concerned with audit firms' ability to detect misstatement and errors in a financial statement through professional skepticism. On the other side, audit firms' independence is concerned with reporting of detected misstatement and errors noted in reported financial statements.

Audit firms' tenure affects quality of audit negatively or positively. There were two philosophical thoughts on the direction of impact of audit firms' tenure on earnings management, firstly, long tenure of audit firms suffices that independence of audit firms' impairment would decline. It is globally acclaimed that longer audit firm tenure leads to lower quality of financial report and increases chances of earnings management.

Seidman (2013) and Anderson (2018) affirmed that longer tenureship of audit firms and short tenureship result in poorer quality of financial reporting because in the earlier years of audit tenure, the auditor is not conversant with the internal control and ethical norms of client companies. On the other hand, Firth et al. (2012) and Daniels and Booker (2011) confirmed that shorter tenureship audit firms enhance independence of auditor and quality of financial report.

In view of the foregoing, we hypothesize that:

H₃: In Nigeria, earnings management is negatively associated with audit firm's tenureship

Audit fee and Earnings Management

Audit fees are associated with quality of service rendered by an external auditor. The enhancement factor of auditing is independence of audit firms. Where auditors' independence is not guaranteed, the biasness of auditing findings can be higher (Braunbeck, 2010). Where non-auditing services are rendered to same clients, the threat of self-review will subject an audit firm to be more willing to overlook accounting inadequacies or deficiencies for fear of losing the additional consultancy fees they earn (Francis, 1984).

Extant literature affirmed that audit fees affect quality of service rendered. The independence of mind and appearance of audit firms tend to compete with self-reviewed services that enhance value to clients. Hence, audit fees have been used to proxy for audit quality (Hallak & Silva, 2012). However, abnormal audit fees do not result to more efficient and effective audit. But it has been affirmed that higher fees translate to more competent audit services and stronger commitment. The second side of the coin, argued that lower audit fees mean poor audit scrutiny, with the views that higher audit fees can cause impairment of auditor independence which can degenerate to biased audit findings.

Evidences indicate that higher audit fees produce illicit practice by corporate firms and inflated future earnings (Kinney & Libby, 2002; Eshleman & Guo, 2013). Symmetry between high audit fees and quality of audit have not been affirmed (Defond et al., 2002). But Choi et al. (2010) affirmed that there exist a nexus between higher audit fees and greater discretionary accrual.

Asthana and Boone (2012) asserts that economic dependence of audit firm on clients pose danger and noted that clients that lavish economic resource on audit firms have higher discretionary accrual. It was also documented that high earnings management risk is associated with high audit fees and that audit fees emanating from earnings management risk is reduced under a litigation risk condition. Hence, scholars suggests that downward earnings management is associated with less audit compensation; and that upward earnings management is associated with greater audit compensation. Thus, we hypothesize that:

H₄: In Nigeria earnings management negatively associated with audit firms' fees

Theoretical Framework

This study is anchored on four main theories: agency theory (Jensen & Mecking, 1976), stakeholder theory (freeman. 1984), legitimacy theory (Dowling & Pfeffer, 1975) and information asymmetry theory (Löfgren, et al., 2002).

Agency theory: Agency theory is a contractual agreement between owners (principals) and managers (agents) to operate a firm in the interests of stakeholders (Jensen & Mecking, 1976). Agency theory designate the relationship between a principal and an agent (Dinu & Tsitinidis, 2013). Agency theory is thus based on bargaining between parties over outcome (McGuire, 1988). This process lead to agency problem between the principal and the agent. Brennan (1995) state that this conflict of interest may give effect to company's share price.

Davidson et al. (2004) states that agency problem arise when managers (agents) do not operate a corporation in the best interest of shareholders; and which results in conflict-of-interest between managers and

shareholders (Zakaria et al., 2022). The agent therefore takes advantage of lack of clarity and fuzzy information of their operations to enhance their private goals. In this research, audit quality and earnings managements presents excellent opportunities to apply agency theory, in the sense that managers act as agent of principal (owner) who in turn employ the service of auditors to checkmate the activities of agent (managers) in the best interest of principals (owners).

Information asymmetry Theory: Information asymmetry theory holds that there is information mismatch between insiders (managers) of a company and outsiders (owners). The theory suggests that audit quality and earnings management originate from this information asymmetry. Thus, to reduce information asymmetry, a company can choose to audit its annual report (Alzoubi, 2016).

The information gap between insider and outsiders is argued to be more prominent when knowledge intense companies are involved (Soyemi & Adeyemi, 2020). This is due to the importance intangibles play in value creation in knowledge intense companies combined with the difficulties outsiders faced, in trying to acquire and interpret information on intangibles (Okotie, 2014). This theory is relevant to this study in the sense that manager who have better access to firm private information can make credible and reliable communication to the market to optimize and maximize the value of the firm for their best interest.

Stakeholder Theory: Stakeholder theory asserts that stakeholders are a wide range of individual and group who can affect or are affected by audit quality and earning management. Healy and Wahlen (1999) argue that stakeholder theory is premised on the idea companies and their impact on the society are pervasive; and that they should discharge accountability to more sectors of the society than only shareholders. Not only are stakeholders affected by companies, they in turn affect companies in some ways. Unlike agency theory, stakeholder theory assumes that managers are accountable to all stakeholders in association with audit quality and earnings management (Siregar & Utama, 2008).

The implication is that the firm has to protect the interest of different stakeholders (Krishnam, 2003). Stakeholder theory has many underlying assumptions which comprises corporation should operate not only for the financial benefit of owners but also for the interest of broader society. The executives are equally accountable to all stakeholders, government, local community, customers and suppliers. The stakeholder theory is strongly connected to the idea of morality in audit quality and earnings management.

Legitimacy theory: Legitimacy theory suggest that firms continually seek to establish congruence between social value associated with or implied by their conduct and the norms and bonds established by society which they are part (Deegan, 2019). The need to demonstrate that a firm is operating in as socially acceptable manner is basis of legitimacy theory. It is expected that firms involved in audit quality strategize to explain, and not excuse any negative aspect of clients' performance or act to redirect attention in order to maintain society's acceptance of their activities.

Legitimacy is an outcome of society's collective perception of an organization's operation. It is a society's assessment of corporate conduct that is considered acceptable, appropriate and desirable (Scott, 1997). Therefore, it is expected that firms will undertake acceptable behavior or at least to be perceived to be good. Scott (1997) emphasize that legitimacy is a generalized perception that the actions of an entity are desirable or appropriate within socially constructed systems of norms, values and beliefs. The basic tenet of legitimacy theory is that perception of firms by the society is based on how the organization acts within socially determined expectation.

METHODOLOGY

The study aims to test the hypotheses deduced from the theoretical framework in order to juxtapose the ability of quality of auditing to minimize or cure income smoothing in firms listed on Nigerian exchange

group (NGX). The population of the study comprised all listed corporate firms whose shares are traded on the Nigerian exchange group (NGX) during the period of 2010-2021.

The selection criteria for sample size are as follows: (a) the company adopts some audit committee attributes such as audit firms' size, joint audit, audit firms' tenure and audit fees; (b) the firms' financial year begins on 1st January and ends 31st December each year; (c) the firms included in the sample are firms whose shares are traded in the capital market and have not been suspended temporarily or permanently during the study period; (d) the firms included are those whose financial statements are available during the period under review.

In the application of these criteria, ten (10) sectors of Nigerian exchange group were selected. Table shows the categories firms so selected.

Table 1: Sampled Companies by Sectors

Sectors	Numbers of sampled company	Numbers of years (2010 - 2021)	Observations
Agriculture	4	12	48
Conglomerate	4	12	48
Construction & Real Estate	3	12	36
Consumer Goods	9	12	108
Healthcare	2	12	24
ICT	3	12	36
Industrial Goods	4	12	48
Oil & Gas	4	12	48
Services	3	12	36
Natural Resources	4	12	48
Total	40		480

Source: Author's Compilation (2023)

Data are sourced from the published financial statement of sampled companies listed in Nigerian Exchange Group (NGX) through the official website (www.machameratios.companies.site). Data collected covered the period from (2010 – 2021).

Measurement of variables

The paper seeks to find the influence of audit firms' attributes on the earnings management of floated companies in NGX. The audit firms' attributes were adopted as exogeneous variables and earnings management (proxy as Discretionary Accruals) was explained variable. The measurement of these variables used were encapsulated in the Table 2

Table 2: Measurement of Variables

Independent variables	
Audit firms' size	measured as dummy where "1" is assigned to companies that use PWC, Deloitte, E&Y and KPMG as external auditors and "0" otherwise
Join Audit	measured as dummy where "1" is assigned to companies that use more than one external auditor in a particular year and "0" otherwise
Audit firms' Tenure	measured as dummy where is computed as "1" is assigned to companies that use external auditor that have stayed for 3 years and "0" for auditors with less than 3 years of engagement
Audit fees	measured as log of total audit fee
Dependent Variable	
Jones Discretionary Accrual Score	Measured as generated residual from regressing inverse of total asset lag sales change to total asset lag and fixed asset to total asset lag on total accrual to total assets
Control variable	
LEVERAGE	Measured as total liabilities divided by total asset

Source: Author's Compilation (2023)

Dependent variable: The explained variable is earnings management, and is proxied by discretionary accruals. The study adopted jones' modified model to measure discretionary (abnormal) accounting accruals (Dechow, et al., 1995). Discretionary accruals can be measured as follows:

Total Accruals (TA): From extant literature there are two alternative approaches to the calculation of total accrual: cash flow and balance sheet approaches. In the cash flow approach, here total accruals is measured by the difference between net income before exceptional and extraordinary items and net cash flow from operating activities as follows:

$$TA_{it} = IBX_{it} - OCF_{it}$$

Where:

TA_{it} : Total accruals for corporate firms (i) at the end of year (t)

IBX_{it} : Net income before exceptional and extraordinary items for corporate firms (i) at the end of year (t)

OCF_{it} : Net cashflow from operating activities for corporate firms (i) at the end of year (t)

- (i) Total accruals is used to estimate linear regression coefficients according to the following equation:

$$TA_{it} / A_{it-1} = \delta_1 (1 / A_{it-1}) + \delta_2 [(\Delta REV_{it} - \Delta REC_{it}) / A_{it-1}] + \delta_3 (PPE_{it} / A_{it-1}) + \varepsilon_{it}$$

Where:

TA_{it} : Total accruals for corporate firms (i) at the end of year (t)

A_{it} : Corporate firms (i)'s total assets at the end of year (t-1)

ΔREV_{it} : The change in corporate firms (i)'s revenue at the end of year (t), which represents the difference between revenue (net sales) at end of year (t) and net receivables at the end of the year (t-1).

ΔREC_{it} : The change in corporate firms (i)'s receivables at the end of year (t) which represents the difference between net receivable at the end of the year (t) and net receivables at the end of year (t-1).

PPE_{it} : total tangible non-current assets for the corporate firm (i) at end of year (t)

$\delta_1, \delta_2, \delta_3$: coefficient of parameters which will be employed in the modified jones model.

ε_{it} = the stochastics error term.

Hence, discretionary accruals are systematic adjustment to cash flow of a corporate firms made by capital users based on its personal judgment or decision to achieve personal benefit. This can be achieved by controlling the timing of the recognition of revenues and expenses. Capital users also deliberately controls certain accounting estimates, which result in the measurement of differences between total accruals and non-discretionary accruals.

It is mathematically defined as $DA_{it} = TA_{it} - NDA_{it}$

When coefficient of earnings management is positively skewed in value, it is implied that earnings management is in an upward direction (a deliberate increase). On the other side, when earnings management is negatively skewed in value, it sufficed is in downward direction (a deliberate reduction). Where discretionary accrual equals zero or close to zero, this means there is no earning smoothing (Radwan, 2013).

Model Specification

A model to test stated objectives and the research hypotheses of audit firms' attributes and earnings management, these could be achieved through multiple regression analysis. Multiple linear regression model is formulated:

$$DA_{it} = \delta_0 + \delta_1 afsize_{it} + \delta_2 jaudit_{it} + \delta_3 atenure_{it} + \delta_4 afee_{it} + \delta_5 levag_{it} + \varepsilon_{it}$$

Where:

δ_0 : regression constant

$\delta_1 - \delta_4$: coefficients of the parameters of the model

afsize : Audit firm size (Big4 or NBig4)

jaudit: Joint Audit

atenure: Audit firm tenure

afee: Audit firm fees

levag; leverage

ε_{it} : error terms

ANALYSIS, RESULTS AND DISCUSSION OF FINDINGS

This section contains the data presentation, descriptive statistics, correlation coefficient result and regression analysis result and discussion of findings.

Table 3: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
disaccrual	477	-.6	.577	-4.33	5.57
Afsize	480	.535	.499	0	1
Jaudit	480	.029	.168	0	1
Atenure	480	.777	.417	0	1
Afee	480	4.171	.615	2.56	5.84
Lavage	480	59.885	24.076	5.07	206.82

Source: Author's Computation (2023)

Table 3 shows that mean of earnings management which is proxies by discretional accrual (disaccrual) stands at -0.6 among the 477 observations. Where minimum and maximum value of earnings management is -4.33 and 5.57 respectively; and standard deviation stands at 0.577. The average of audit firm size stands at 0.535 with the value of maximum and minimum standing at 1 and 0; and standard deviation standing at 0.499. This means that only 53.3% of sampled companies were audited by big4 audit firms.

Auditors' tenure has average value of 0.777 with minimum and maximum values of 0 and 1. The standard deviation stands at 0.417. This data of auditors' tenure implies that 77.7% of auditors have tenure retained in the companies where they are appointed to serve as auditors. The average audit fee stands at 4.17, while the minimum and maximum values stand at 2.56 and 5.84 respectively. The associated standard deviation value is 0.615. This implies the average fee is 417.1% of what audit firms charged their clients.

Table 4: Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)
(1) disaccrual	1.000					
(2) aFSIZE	-0.072	1.000				
(3) JAUDIT	-0.060	0.062	1.000			
(4) ATENURE	-0.019	-0.037	0.033	1.000		
(5) AFEE	-0.059	0.612	0.259	-0.072	1.000	
(6) LEVAGE	-0.051	-0.182	-0.103	0.036	-0.056	1.000

Source: Author's Computation (2023)

Table 4 shows the links between the dependent variable and explanatory variables. The dependent variable (earnings management) is proxied by discretionary accrual (disaccrual). This results reveals the existence of negative weak association between audit firm size and earnings management (aFSIZE/disaccrual= -0.072); negative weak nexus between joint audit and earnings management (JAUDIT/disaccrual = -0.060); inverse association between auditors' tenure and earnings management (ATENURE/disaccrual = -0.019); and a negative weak association between audit fee and earnings management (AFEE/disaccrual=-0.059).

In summary, the results in Table 4 reveals two statistical meanings. One, that all the explanatory variables have adverse association with the outcome variable. This suffices that the independent variables minimize earnings management in sampled firms. Secondly, the result reveals that the nexus between the explanatory variables and the outcome variable is weak. This shows that there is absent of problem of multicollinearity among the independent variables.

Table 5: Mixed-effects ML regression

disaccrual	Coef.	St.Err.	t-value	p-value	[95% Conf Interval]	Sig
aFSIZE	-.042	.062	-0.68	.499	-.164 .08	
JAUDIT	-.151	.166	-0.91	.362	-.476 .174	
ATENURE	-.059	.061	-0.97	.333	-.178 .06	
AFEE	-.093	.024	-3.82	0	-.141 -.045	***
LEVAGE	-.002	.001	-1.91	.056	-.005 0	*
Constant	-.553	.032	-17.09	0	-.617 -.49	***
Mean dependent var		-0.600	SD dependent var		0.577	
Number of obs		477	Chi-square		522.501	
F statistics		23.12	R-square		0.961	
Prob > chi2		0.000	Akaike crit. (AIC)		837.815	

Source: Author's Computation (2023) *** $p < .01$, ** $p < .05$, * $p < .1$

Table 5 shows an F-statistic value of 23.12(0.00) mixed effect model, which is valid for drawing inferences, since it is statistically significant at 5%. In the case of the coefficient of determination (R^2), it was observed that 96% of variations in discretionary accrual (disaccrual) was explained jointly by the independent variables in the mixed effect model. In testing for the cause-effect relationship between the explained and explanatory variables in Table 5, the research used panel data regression estimation techniques (mixed effect). Table 4 presents the panel data estimation techniques results (mixed effect). The results revealed difference in the magnitude of coefficients, signs and number of insignificant and significant variables. In

testing our hypotheses, we provide the below specific analysis for each of the independent variables using the mixed effect regression.

Audit Firm Size and Earnings Management

Audit firm size ($afsize = -.042 (0.499)$) as independent variable to discretionary accrual (disaccrual) appears to have negative and insignificant influence on earnings management at 5% level of significance. Hence, *In Nigeria, earnings management is negatively associated with audit firms' size*. This result agree with existing literature, which indicate that audit firm size (audit quality) reduces the tendency of earnings management. This is consistent with prior studies that reveal relationship between auditor size and total discretionary accruals based on the modified Jones (1991) model. Francis and Wang (2008) found that firms which hire a big5 auditors report lower discretionary accruals, consistent with big5 auditors constraining opportunistic reporting of accruals (Zahid et al., 2023).

Joint Audit and Earnings Management

Joint Audit ($jaudit = -0.151 (0.362)$) as exogenous variable to discretionary accrual (disaccrual) shows a negative and insignificant influence on earnings management at 5% level of significance. Henceforth, *In Nigeria, earnings management is negatively associated with joint audit*. This result is consistent with extant literature, which indicated that joint audit reduces tendency of earnings management. The result suggests that joint audit discourage management from manipulating earning figures in annual reports. This result is also consistent with the vast majority of the previous research that investigated effect of joint audit on earnings management, including Choi et al. (2004), Park and Shin (2004), Carcello and Neal (2003), Li et al. (2023) and Metawee (2013).

Audit firms' Tenure and Earnings Management

Auditors' tenure ($atenure = -.059 (0.333)$) as explained variable to earnings management (disaccrual) has a negative insignificant relationship with the dependent variable. This is at 5% level of significance. This means that, *in Nigeria, earnings management is negatively associated with audit firms' tenure*. The result implies that tenure of auditors discourage management from manipulating earnings. This result is similar to that of Xie et al. (2003), Abbott et al. (2004) and Bédard et al. (2004) that examined effect of auditors' tenure on earnings management.

Audit Fees and Earnings Management

The test revealed that audit fee and earnings management are inversely related ($afee = -.093 (0.045)$). Thus, it can be inferred that: *in Nigeria, earnings management is negatively associated with audit firms' fees*. This position is consistent with that of Alzoubi (2019), Mansor et al. (2013) and Ghaleb et al. (2020) which proves that audit fee has a negative significant effect on earnings management. Summarily, the above discussions on the result of the study revealed that all the independent variables demonstrate capacity to reduce incidence of earnings management.

CONCLUSION AND RECOMMENDATIONS

This study investigated the explanatory prowess of audit firms' attributes to minimize the reduce earnings management. The results obtained from the study revealed that audit firms' size, joint audit, audit firms' tenure and audit fees check capital users' aptitude to smoothen their earnings, to the detriments of other stakeholders. Furthermore, results of data analyses showed that all the explanatory variables accommodated in the study had inverse weak relationship with earnings management. Firstly, audit firms' size. The study revealed that engaging services of audit firms connotes that more capital, technology, human resources and other incidental materials needed for effective auditing is actually deployed.

Secondly, joint audit provide a platform for synergy of capital, technology, human resources and experience, and actually played a role in audit quality; and dispel ambitions of capital users to manipulate

financial estimates at the detriment of high quality of earnings. Thirdly, audit firms' tenureship showed that long or short tenureship has negative influence on ability of capital users to involve in smoothing financial estimate.

Lastly, audit fees is negatively associated with discretionary accruals measurement of earnings management. These results suggested that audit fees is a significant driver of audit quality, which in turn affects managers' flexibility to manipulate reported earnings. Thus, it seems that audit firms who charge high audit fees provide high quality auditing, and this constrains earnings management activities.

The results of the study align with the provisions of agency theory which stipulates that capital owners (principals) contract responsibilities of scrutinizing financial reports prepared by capital users (agents) to independent audit firms. Hence, audit firms' attributes proxied by audit firms' size, joint audit, audit firms' tenure and audit fees minimized or eliminates the menace of earnings management.

POLICY IMPLICATIONS

This paper came out with some critical conclusions; considering that extant literature provides mixed outcome of the interaction between audit firms' attributes and earnings management. The results of this study revealed that all attributes audit firms considered in the study showed capacity to curb capital users' manipulations relating to earnings management. This provides an insightful new dimensions for stakeholders that audit firms size, joint audit, audit firms tenureship and audit fees provide a leverage for regulators, audit firms, creditors, and capital owner that these attributes can minimize, if not totally eliminate income smoothing.

REFERENCES

- Abbott, L. J., Park, Y., & Parker, S. (2000). The effects of audit committee activity and independence on corporate fraud. *Managerial finance*, 26(11), 55-68.
- Abbott, L. J., Parker, S., & Peters, G. F. (2004). Audit committee characteristics and restatements. *Auditing: A journal of practice & theory*, 23(1), 69-87.
- Adeusi A. S., Igbekoyi O. E., & Ologun O. V. (2019). Corporate governance mechanisms and employees' compensation. *Accounting and Taxation Review*, 3(2), 66-84
- Alzoubi, E. S. S. (2016). Audit quality and earnings management: Evidence from Jordan. *Journal of Applied Accounting Research*.
- Asthana, S. C., & Boone, J. P. (2012). Abnormal audit fee and audit quality. *Auditing: a journal of practice & theory*, 31(3), 1-22.
- Ayers, B. C., Jiang, J., & Yeung, P. E. (2006). Discretionary accruals and earnings management: An analysis of pseudo earnings targets. *The Accounting Review*, 81(3), 617-652.
- Bamahros, H. M., & Wan Hussin, W. N. (2015). Non-audit services, audit firm tenure and earnings management in Malaysia. *Asian Academy of Management Journal of Accounting and Finance*, 11(1), 145-168.
- Baber, W. R., Kang, S. H., & Li, Y. (2011). Modeling discretionary accrual reversal and the balance sheet as an earnings management constraint. *The Accounting Review*, 86(4), 1189-1212.
- Bassiouny, S. W. (2016). The impact of firm characteristics on earnings management: An empirical study on listed firms in Egypt. *Journal of Business and Retail Management Research*, 10(3). 136-153.
- Beasley, M. S., & Petroni, K. R. (2001). Board independence and audit-firm type. *Auditing: A Journal of Practice & Theory*, 20(1), 97-114.
- Becker, C. L., DeFond, M. L., Jiambalvo, J., & Subramanyam, K. R. (1998). The effect of audit quality on earnings management. *Contemporary accounting research*, 15(1), 1-24.

- Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, 14(3), 257-273.
- Braunbeck, G. O. (2010). *Determinantes da qualidade das auditorias independentes no Brasil* (Doctoral dissertation, Universidade de São Paulo).
- Brennan, M. J. (1995). Corporate finance over the past 25 years. *Financial Management*, 9-22.
- Charles, P., & Maccarthy, M. I. T. (2023). Audit quality and earnings management of listed international licensed commercial banks in Nigeria. *BW Academic Journal*, 21-21.
- Chen, K. Y., & Zhou, J. (2007). Audit committee, board characteristics, and auditor switch decisions by Andersen's clients. *Contemporary Accounting Research*, 24(4), 1085-1117.
- Chen, Y. M., Moroney, R., & Houghton, K. (2005). Audit committee composition and the use of an industry specialist audit firm. *Accounting & finance*, 45(2), 217-239.
- Choi, J. H., Kim, J. B., & Zang, Y. (2010). Do abnormally high audit fees impair audit quality? *Auditing: A Journal of Practice & Theory*, 29(2), 115-140.
- Cohen, D. A., Dey, A., & Lys, T. Z. (2008). Real and accrual-based earnings management in the pre-and post-Sarbanes-Oxley periods. *The accounting review*, 83(3), 757-787.
- Davidson III, W. N., Jiraporn, P., Kim, Y. S., & Nemeck, C. (2004). Earnings management following duality-creating successions: Ethnostatistics, impression management, and agency theory. *Academy of management journal*, 47(2), 267-275.
- Davidson, Wallace N.; Jiraporn, Pornsit; Kim, Young Sang; Nemeck, Carol (2004). Earnings management following duality-creating successions: Ethnostatistics, impression management, and agency theory. *Academy of Management Journal*, 47(2), 267-275.
- Delgado, F. J., Fernández-Rodríguez, E., García-Fernández, R., Landajo, M., & Martínez-Arias, A. (2023). Tax avoidance and earnings management: a neural network approach for the largest European economies. *Financial Innovation*, 9(1), 19.
- De Angelo, L. E. (1981). Auditor size and audit quality. *Journal of Accounting and Economics*, 3(3), 183-199.
- Deegan, C. M. (2019). Legitimacy theory: Despite its enduring popularity and contribution, time is right for a necessary makeover. *Accounting, Auditing & Accountability Journal*.
- DeFond, M. L., Raghunandan, K., & Subramanyam, K. R. (2002). Do non-audit service fees impair auditor independence? Evidence from going concern audit opinions. *Journal of Accounting Research*, 40(4), 1247-1274.
- Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *Pacific Sociological Review*, 18(1), 122-136.
- Dutillieux, W., & Willekens, M. (2009). The impact of SOX on earnings quality outside the US: Evidence from Belgian subsidiaries of US listed companies. *FBE Research Report AFI_0830*, 1-50.
- Eshleman, J. D., & Guo, P. (2014). Abnormal audit fees and audit quality: The importance of considering managerial incentives in tests of earnings management. *Auditing: A Journal of Practice & Theory*, 33(1), 117-138.
- Francis, J. R. (1984). The effect of audit firm size on audit prices: A study of the Australian market. *Journal of Accounting and Economics*, 6(2), 133-151.
- Francis, J. R., Maydew, E. L., & Sparks, H. C. (1999). The role of Big 6 auditors in the credible reporting of accruals. *Auditing: A Journal of Practice & Theory*, 18(2), 17-34.
- Francis, J. R., & Wang, D. (2008). The joint effect of investor protection and Big 4 audits on earnings quality around the world. *Contemporary Accounting Research*, 25(1), 157-191.
- Freeman, R. E. (2004). The stakeholder approach revisited. *Zeitschrift für wirtschafts-und unternehmensethik*, 5(3), 228-254.
- Ghaleb, M., Zolfagharinia, H., & Taghipour, S. (2020). Real-time production scheduling in the Industry-4.0 context: Addressing uncertainties in job arrivals and machine breakdowns. *Computers & Operations Research*, 123, 105031.
- Gul, F. A., Fung, S. Y. K., & Jaggi, B. (2009). Earnings quality: Some evidence on the role of auditor tenure and auditors' industry expertise. *Journal of accounting and Economics*, 47(3), 265-287.

- Hallak, R. T. P., & Silva, A. L. C. D. (2012). Determinants of audit and non-audit fees provided by independent auditors in Brazil. *Revista Contabilidade & Finanças*, 23, 223-231.
- Hassan, S. U., & Ahmed, A. (2012). Corporate governance, earnings management and financial performance: A case of Nigerian manufacturing firms. *American International Journal of Contemporary Research*, 2(7), 214-226.
- Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting horizons*, 13(4), 365-383.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Jackson, A. B. (2018). Discretionary accruals: Earnings management or not? *Abacus*, 54(2),
- Kinney, W. R., & Libby, R. (2002). The relation between auditors' fees for non-audit services and earnings management: Discussion. *The Accounting Review*, 77, 107-114.
- Knapp, M. C. (1991). Factors that audit committee members use as surrogates for audit quality. *Auditing-A Journal of Practice & Theory*, 10(1), 35-52.
- Krishnan, G. V. (2003). Does Big 6 auditor industry expertise constrain earnings management? *Accounting Horizons*, 17, 1-16.
- Krishnan, G. V., & Visvanathan, G. (2008). Was Arthur Andersen different? Further evidence on earnings management by clients of Arthur Andersen. *International Journal of Disclosure and Governance*, 5, 36-47.
- Lin, J. W., & Hwang, M. I. (2010). Audit quality, corporate governance, and earnings management: A meta-analysis. *International journal of auditing*, 14(1), 57-77.
- Li, W., Yan, T., Li, Y., & Yan, Z. (2023). Earnings management and CSR report tone: Evidence from China. *Corporate Social Responsibility and Environmental Management*. Retrieved from <https://doi.org/10.1002/csr.2461>
- Löfgren, K. G., Persson, T., & Weibull, J. W. (2002). Markets with asymmetric information: the contributions of George Akerlof, Michael Spence and Joseph Stiglitz. *The Scandinavian Journal of Economics*, 195-211.
- Mansor, N., Che-Ahmad, A., Ahmad-Zaluki, N. A., & Osman, A. H. (2013). Corporate governance and earnings management: A study on the Malaysian family and non-family owned PLCs. *Procedia Economics and Finance*, 7, 221-229.
- McGuire, J. B. (1988). Agency theory and organizational analysis. *Managerial Finance*, 14(4), 6-9.
- Na, K., Lee, Y. J., & Yu, H. (2023). CEO Type and Earnings Management to Avoid Loss or Earnings Decreases: Evidence from South Korea. *International Journal of Business*, 25(2), 227-254.
- Park, Y. W., & Shin, H. H. (2004). Board composition and earnings management in Canada. *Journal of corporate Finance*, 10(3), 431-457.
- Scholtens, B., & Kang, F. C. (2013). Corporate social responsibility and earnings management: Evidence from Asian economies. *Corporate Social Responsibility and Environmental Management*, 20(2), 95-112.
- Piot, C., & Janin, R. (2007). External auditors, audit committees and earnings management in France. *European Accounting Review*, 16(2), 429-454.
- Scott, W. R. (1997). *Financial accounting theory*. Prentice Hall.
- Siregar, S. V., & Utama, S. (2008). Type of earnings management and the effect of ownership structure, firm size, and corporate-governance practices: Evidence from Indonesia. *The International Journal of Accounting*, 43(1), 1-27.
- Soliman, M. M., & Ragab, A. A. (2014). Audit committee effectiveness, audit quality and earnings management: an empirical study of the listed companies in Egypt. *Research Journal of Finance and Accounting*, 5(2), 155-166.
- Soyemi, K. A., Olufemi, O. A., & Adeyemi, S. B. (2020). External audit (or) quality and accrual earnings management: Further evidence from Nigeria. *Malaysian Management Journal*, 24, 31-56.
- Sun, J., Lan, G., & Liu, G. (2014). Independent audit committee characteristics and real earnings management. *Managerial Auditing Journal*.

- Unerman, J., & O'Dwyer, B. (2004). Enron, WorldCom, Andersen et al.: a challenge to modernity. *Critical Perspectives on Accounting*, 15(6-7), 971-993.
- Xie, B., Davidson III, W. N., & DaDalt, P. J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance*, 9(3), 295-316.
- Zakaria, N. B., Zulkefeli, H. A., & Rahman, R. A. (2022). Earnings management and audit quality: Evidence from Malaysia. *Management*, 12(1), 98-118.
- Zerni, M., Haapamäki, E., Järvinen, T., & Niemi, L. (2012). Do joint audits improve audit quality? Evidence from voluntary joint audits. *European Accounting Review*, 21(4), 731-765.